



## PERCUTANEOUS TRANSLUMINAL ANGIOPLASTY OF THE SUBCLAVIAN ARTERIES. LONG-TERM FOLLOW UP

ACC Poster Contributions

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Purpose: To review feasibility, safety and long-term results of subclavian artery angioplasty.

**Methods:** 357 patients (males: 205, mean age:  $65.2 \pm 12$  y) underwent percutaneous treatment for subclavian artery (SA) occlusive disease (stenosis: 254, occlusion: 92). Left: 272, Right: 85, Innominate Artery: 18.

**Etiology:** atheromatous: 349, others: 8 (Takayasu: 4)

Mean % stenosis  $82.8 \pm 7.7$ . Mean lesion length:  $23.7 \pm 8.9$  mm

Indications for treatment were upper limb ischemia (ULI) (n=167)

Vertebrobasilar insufficiency (VBI) (n=137), associated VBI and ULI (n=103), coronary steal syndrome (n=16) asymptomatic patients with severe coronary disease (n=53) 29 patients had associated Vertebral Artery stenosis, 71 carotid stenoses, 303 lesions were prevertebral, 35 post vertebral, both 19. Percutaneous techniques included retrograde femoral (n=257), brachial artery (n=71) access or both (n=29) and in 6 cases the "pull through technique").

An isolated balloon angioplasty was performed in 59 cases and 298 stents were implanted (balloon expandable : 236, self expandable: 62.

**Results:** Technical success was obtained in 339 lesions (95 %) 100% for stenoses. Only 74 occlusions were recanalized (80 %). Four periprocedural events occurred (1.2 %), 1 major (fatal stroke), 1 T.I.A., 2 arterial thromboses. At follow-up (mean follow-up:  $68.7 \text{ months} \pm 37.5$ ), we had 37 restenoses (12 %). 13 occurred following angioplasty alone (18.8 %) and 24 following angioplasty and stent implantation (8.6 %) ( $P < 0.01$ ). Primary (PI) and secondary (PII) patencies on an intention to treat basis at 10-year follow-up were 79.5 % and 85.7 % respectively. In patients without initial stent placement, the rates were 67.5 % and 75.5 % while in those with stents, the rates rose to 91.2 % and 97.6 % ( $P < 0.01$ ). PI for all recanalized lesions were 85.3 %, 79.1 % without stent, 91.2 % with stent ( $P < 0.04$ ) and PII 92.3 %, 88.5 %, 97.6% respectively ( $P < 0.02$ ).

**Conclusion:** P.T.A. is currently the treatment of choice for subclavian artery lesions. It is a safe and effective procedure associated with low risks and good long-term results. Stents seem to limit the restenosis rate and improve long-term results.